

# Standing Committee «Knowledge and Technology »



## Development of knowledge and technology in EU research community

**Riga meeting**  
23-24 May 2008

Georges Pilot



# What's about R&D at European level?

- Objective : to deliver recent information on :
  - EU Research Programme : 7th Framework Programme
  - EU Research Programme : Joint Technology Initiative
  - EUREKA Initiative
  - Competitiveness and Innovation Programme
  - **ECCREDI**: European Council for Construction, Research, Development and Innovation
  - **ECTP**: European Construction Technology Platform
- > *Nota : a document file is added in the ECCE CD*

# FP7 and other EC Projects

## 14 NMP Projects (ECCREDI List )

- **INTEg-Risk** - *Management of emerging risks in the innovative industry*
- **IRIS** – *Focus on diverse industrial safety problems and transform industry requirements into integrated, knowledge-based safety technologies, standards and services*
- **MULTILAYER** – *Development of low cost mass production technologies for manufacturing complex non silicon multifunctional 3D micro parts*
- **WOODY** – *New laminates and sandwich panels reinforced with continuous long wood fibres*
- **DEPHOTEX** – *Flexible photovoltaic cells*
- **NATEX** – *Bio composite materials from modified natural fibres*
- **COST-EFFECTIVE** – *Resource and Cost Effective Integration of renewables in existing high-rise building*
- **H2 SUSBUILD** – *Development of an Intelligent self-sustained and zero CO2 emission hybrid system for residential/commercial buildings and districts buildings*
- Etc..

# 7th Framework Programme

## 8 Environment Projects (ECCREDI List)

- **HITEA** - *Health Effects of Indoor Pollutants: Integrating microbial, toxicological and epidemiological approaches*
- **HEREPLUS** – *HEalth Risk from Environmental Pollution Levels in Urban Systems*
- **MIAVITA** – *Mitigate and assess risk from volcanic impact on terrain and human activities*
- **LoRe-LCA** - *Low Resource consumption buildings and constructions by use of LCA in design and decision making*
- **PERFECTION** - *Performance indicators for health, comfort and safety of the indoor environment*
- **SMooHS** - *Smart Monitoring of Historic Structure*
- **TeACH** - *Technologies and Tools to prioritize assessment and diagnosis of air pollution impact on immovable and movable Cultural Heritage*
- **CHRESP** - *Cultural Heritage Research meets practice*

# 7th Framework Programme

## 4 ICT Projects (ECCREDI List)

- **REEB** – *The European strategic research Roadmap to ICT enabled Energy-efficiency in Buildings and Constructions*
- **IntUBE** – *Intelligent Use of Buildings Energy Information*
- **AALIANCE** – *European ambient assisted living innovation alliance*
- **COMPANIONABLE** – *Integrated cognitive assistive and domotic companion robotic systems for ability and security*

# EU Commission. R&D Directorate

## Next Calls for Proposals

### >> Nanotechnologies, Materials, Processes (NMP)

- 2<sup>nd</sup> Call (2008) closed on 6th March:
  - *3.4.2 Industrialisation through new integrated construction processes*
  - *4.0.8 Smart materials for applications in the sector of construction and of machinery and production equipment (SME)*
- 3<sup>rd</sup> Call (2009) under preparation
  - 3.5 Exploitation of the convergence of technologies:*
    - . Healthy, safe, accessible and stimulating built environment*
    - . Reducing environmental footprint of energy intensive industries*
- Later (2010 ?)
  - Embedded intelligence for use of buildings and life cycle management, + possible other topics*

# EU Commission. R&D Directorate

## Next Calls for Proposals

### >> Information and Communication technologies (ICT)

Call in progress : 29th April/9th September 2008

Theme 2 : ICT for energy efficiency and sustainability in urban areas

- *2.1 ICT for energy efficiency in buildings and public areas, lighting included*
- *2.2 ICT for infrastructures and adaptable services for management of urban transports*
- *2.3 To find consensus and to share experiences on ICT for energy efficiency and sustainability in urban areas.*

### >> Environment, Transports : Confidential orientation documents

# ECTP <sup>(2)</sup>

## EUREKA Umbrella project: EurekaBuild (E!3790)

### Technologies for a sustainable and competitive sector

- **711 Eureka projects in progress.** 8 construction projects...few!
- **EurekaBuild** (June 2006) to prepare Eureka projects (NTPs)
- **EurekaBuild « ideas of projects »** at Versailles ECTP Conference.
- **« Workshop and Brokerage event » in 2007 and 2008:**
  - January 2008. Poland: ICT
  - April 2008. Lithuania: Energy Efficient Construction
  - May 200. Croatia: Networks for sustainable environment, high quality of life
- **Ideas of projects:** around 100 in May 2008
- **2 EurekaBuild projects:**
  - **STACON** (E!4078): Stabilisation and solidification of contaminated sediments and other dredged materials (Norway, Sweden). 30 months, 3,55 M€.
  - **GEOSUITE 2** (E!3972): A software for geo-community in Scandinavia and abroad (Norway, Sweden). 48 months



# Competitiveness and Innovation Programme (CIP)

- Entrepreneurship and Innovation Programme (EIP)
- Information Communication Technologies Policy Support Programme (ICT PSP)
- Intelligent Energy Europe (IEE )

>> IEE 2008 Call for proposals (46 M€, closing date : 26 June 2008)

Projects, new energy management Agencies.

(Strategic studies, creation, enlargement, reorganisation of structures and instruments, promotion of sustainable investment, information-education-training, ..)

- 1. *Energy efficiency and rational use of resources (SAVE)*
- 2. *New and renewable energy sources (ALTERNER)*
- 3. *Energy in transport*
- 4. *Integrated initiatives*

# Competitiveness and Innovation Programme (CIP)

## >> 2008 Eco-Innovation Call for innovative environmental products, services, management practices or processes

(28 M€, Closing date : 11 September 2008)

### Technically demonstrated projects high quality projects

- **1. Materials recycling**  
*Improved sorting processes for materials such as construction, etc....*
- **2. Buildings**
  - . *Processes or products that reduce environment impact...*
  - . *Green building techniques ...recycled materials and renewable sources*
  - . *New water-saving systems*
  - . *Sustainable construction, maintenance, repair, retrofitting/demolition techniques*
- **3. Food and drink**
- **4. Greening business and smart purchasing**
  - . *....increase the efficiency and the sustainability of SMEs*

# European Construction Technology Platform

## Strategic Research Agenda. Implementation Action Plan

- **Objectives**

To select the more important and urgent areas to deal with 2007-13

- **Content**

- A. Technologies for Healthy, Safe, Accessible & Stimulating **Indoor Environment**
- B. Innovative use of **Underground Space**
- C. New Technologies, Concepts and High-Tech **Materials**
- D. **Reduce** Environment and Man-made **Impact** of Built Environment and Cities
- E. **Sustainable Management** of Transports and Utility Networks
- F. A living **Cultural Heritage** for an Attractive Europe
- G. Improve **Safety and Security** with the Construction Sector
- H. New **Integrated Processes** for the Construction Sector
- I. High Added Value **Construction Methods**

- **Ways for Implementation**

- EU Research Programmes
- National Programmes (National Technology Platform?)
- EurekaBuilt Projects

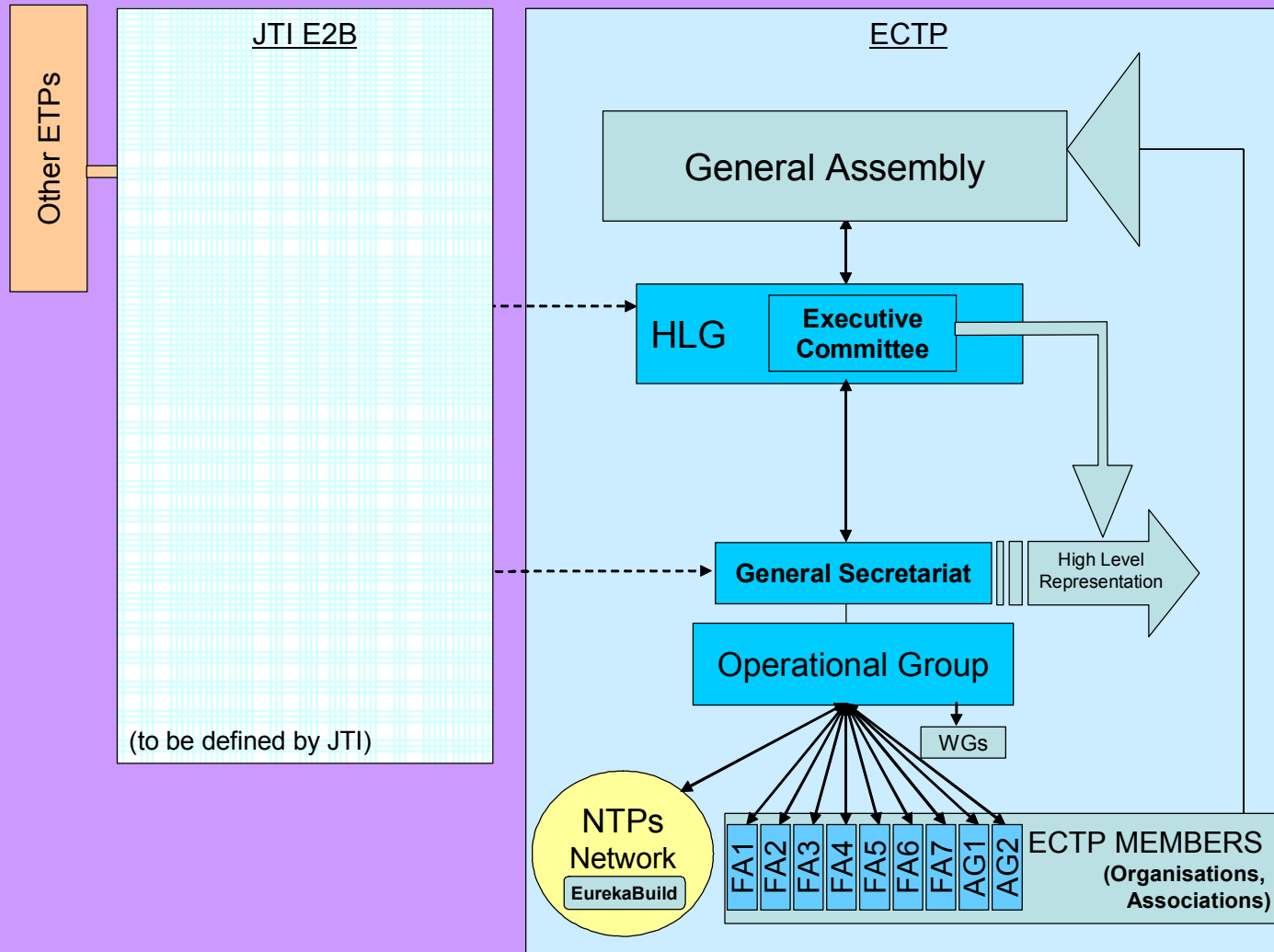
# European Construction Technology Platform (ECTP)

## Re-organisation...

- **EU contract used for ECTP management is finished .**  
*How to get money? Subscription of fees by ECTP members?*
- **Jesus Rodriguez leaves the Support Group Chairmanship.**  
*A new Chairman. A different style?*
- **ECTP has already produced major contributions:**  
Vision 2030, SRA, SRA Implementation Plan.  
*>> New objectives: Promote and update SRA and IAP, promote research projects, launch and support the JTI E2B, dissemination and exploitation of research results (innovation). NTPs.*
- **A quite different structure...with participants fees...**
  - *Members Categories: Construction companies, Suppliers, Designers/Consultants, Operators/Clients, Research organisation, Universities, Users organisations, Associations*
  - *A new Structure (Diagramme to come)*
  - *Rules for fees (Big firms, SMEs, Research Institutes, Associations)***>> Which ECCE Position?**

# European Contruction Technology platform

## The new Structure



# European Construction Technology Platform (ECTP)

- **Questions for an ECCE position?**
  - Membership: an Association
  - Position in the new structure : only in Focus Areas
  - Annual ECTP fees : 750 €.....+ Extra fees
- **Options for ECCE?**
  - No participation in ECTP : no ECCE Ambition?
  - Full ECTP Member: advantages/disadvantages
  - « Associated-member » through ECCREDI
    - ECCREDI should be High Level Group Member
    - Advantages expected for ECCE : documentation OK, no fees
    - Disadvantages : indirect influence, indirect participation in Focus Areas, Extra-fees

# Joint technology initiative (JTI) ECTP. Energy Efficiency Building (E2B)

- JTI : **Huge project** agreed by Council and Parliament.
- E2B : adoption on 20th June 2007, **launching 28th February 2008.**
- *« To deliver and implement building and district concepts that have a technical, economic and societal potential to drastically cut the energy consumption and reduce CO2 emissions due to existing and new buildings within 2030, thereby contributing to improve EU energy independence ».*
- **Structure** : General Assembly, Steering Committee, Working Groups, Secretariat.
  - Co-leaders : Acciona and Bouygues.
  - 6 founding Members : Acciona and isophon (Spain), Bouygues and EDF (France), Maxit (Sweden), Mostostal (Poland), + 2 more expected.
- **Appointment** by EU Commission.
- **Financial governance** (Funds from Commission, States, Members)
- **JTI Calls for proposals** .....

# ECCREDI to- day

- **The unique Construction Sector Association**  
Contractors, SMEs, Materials Suppliers, Consultants, Research institutes, ..
- **Follow-up of FP7 and Programmes: Invaluable information**
  - Results of Calls : Lists of accepted projects
  - Preliminary information on Working programmes for new Calls
- **Working programme**
  - Actions addressing SMEs
  - Lead Market Initiative Sustainable Construction
  - Standardisation
  - ICT and Construction
- **Participation in ECTP**
  - ECCREDI, ECTP Member as Association, possible relay for others.
  - ECTP High Level Group (Scott Steedman)
  - Initiate actions to monitor implementation of the SRA
- **Communication.**
  - Newsflashes (last issue December 2007)
  - Exchange newsletters
  - Website ([www.eccredi.org](http://www.eccredi.org) )



# Conclusions

- **ECCE follows R&D activities in EU Communities :**
  - EU Research Directorate : 7th Framework Programme
  - EU Entreprises and Industry Directorate : Communication and Innovation
  - ECTP : European Construction Technology Programme
  - ECCREDI : European Council for Construction Research, Development and Innovation
- **EU 7th Framework Programme**
  - Updated list of accepted R&D Projects
  - Follow-up of new Calls for Proposals
  - Encouragements for EUREKA Partnership
- **EU CIP Programme :** Investigation to be made
- **ECTP :** Define new position and actions for ECCE
- **ECCREDI :** Confirm an active position
  - >> **ECCE Members wishes?**